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THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A descent apparatus for loads and/or persons,
said apparatus including a cable or rope having one end
5 adapted to fixed at an elevated location with the remainder
of the cable or rope being wound around an inner pulley
rotatably mounted within an outer housing via an axle
shaft, wherein the outer housing is adapted to be attached
directly to the load and/or person, and wherein the
10 relative rotation between the inner pulley and the axle
shaft is controlled by a closed circuit gear pump the gears
of which form transmission means between the inner pulley
and the axle shaft, said closed circuit gear pump forming
part of a hydraulic circuit containing a constriction to
15 control the speed of the pump and thus the speed of
rotation of the inner pulley about the axle shaft and as a
consequence the speed of descent of the descent apparatus
as the cable or rope unwinds from the inner pulley.
- 20 2. A descent apparatus as claimed in Claim 1,
wherein the size of the constriction is fixed so as to
provide a single predetermined speed of descent.
3. A descent apparatus as claimed in Claim 1,
25 wherein the size of the constriction may be variable to
provide for different speeds of descent.
4. A descent apparatus as claimed in any one of the
preceding claims, wherein the inner pulley includes as cup-
30 shaped member having an open end closed by a closure member
both of which members carry radially outwardly extending
flanges between which a space is defined to retain the
cable or rope around the pulley.
- 35 5. A descent apparatus as claimed in Claim 4,
wherein the cup-shaped member and the closure member define
an inner cavity which contains said closed circuit

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gear pump.

6. A descent apparatus as claimed in any one of the preceding claims, wherein the closed circuit gear pump
5 includes a central sun gear and a plurality of diametrically opposed planet gears.

7. A descent apparatus as claimed in Claim 6,
wherein the sun and planet gears are rotably sandwiched
10 between members which include a series of orifices and cavities and interconnecting channels through which hydraulic fluid for the hydraulic circuit is pumped through the closed circuit gear pump.

8. A descent apparatus as claimed in Claim 7,
15 wherein the constriction is provided in one of the orifices, cavities or channels.

9. A descent apparatus as claimed in Claim 8,
20 wherein the constriction is provided by one of the orifices through one of the members which sandwich the sun and the planet gears.

10. A descent apparatus as claimed in Claim 9,
25 wherein the constriction is provided by a valve member co-operating with a mating seat in the end of said orifice.

11. A descent apparatus as claimed in Claim 10,
wherein the position of the valve member relative to its
30 seat is adjustable to thereby control the rate of flow of hydraulic fluid through said closed circuit fluid pump and the speed of descent of the descent apparatus.

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12. A descent apparatus, substantially as
hereinbefore described with reference to the accompanying
drawings.

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FALLSAFE TECHNOLOGY PTY LTD
By their Patent Attorneys
GRIFFITH HACK
Fellows Institute of Patent and
10 Trade Mark Attorneys of Australia